

# MAINE PUBLIC HEALTH ALERT NETWORK SYSTEM

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*Maine Department of Health and Human Services  
Maine Center for Disease Control and Prevention (Maine CDC)  
(Formerly Bureau of Health)  
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***\*\*ADVISORY – Important Information\*\****

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**2009PHADV064**

**TO:** All Infection Control Practitioners; All Physicians; All Hospital ED; All RM Hospital Contacts; Northern New England Poison Control Center; Public Health - Required; County EMA Directors; All Public Health Nurses; All EMS; All RRC's

**FROM:** Dora Anne Mills, M.D., M.P.H., Public Health Director

**SUBJECT:** Agranulocytosis/Severe Neutropenia in Cocaine Users

**DATE:** December 17, 2009

**TIME:** 4:00pm

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**PRIORITY:** High

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## **Agranulocytosis/Severe Neutropenia in Cocaine Users**

The Substance Abuse and Mental Health Services Administration (SAMHSA) has learned of several cases of agranulocytosis, a serious, acute blood disease characterized by low white blood cell counts, among cocaine users. The Maine Center for Disease Control and Prevention (Maine CDC) is working with federal CDC to investigate the incidence of agranulocytosis among persons who use cocaine.

**Background:** The cause appears to be associated with cocaine that had been adulterated with levamisole. Levamisole has been used in veterinary medicine and is currently approved for use in cattle, sheep and swine as an anti-parasitic agent. It was used in human medicine in the past for treating autoimmune diseases and cancer, but it is no longer an approved drug for human use.

Ingesting cocaine mixed with levamisole can seriously reduce a person's white blood cells, suppressing immune function and the body's ability to fight off even minor infections. People who snort, smoke, or inject crack or powder cocaine contaminated by levamisole can experience overwhelming, rapidly-developing, life threatening infections. Other serious side effects can also occur.

According to the Drug Enforcement Administration (DEA) and State testing laboratories, the percentage of cocaine specimens containing levamisole has increased steadily since 2002. The DEA reported that as of July 2009, 69% of the cocaine supply seized before arriving in the U.S. contained levamisole; so users of cocaine might be at high risk.

**Recommendations:** The Maine CDC asks substance abuse services providers and clinicians to report any case of unexplained agranulocytosis/ severe neutropenia in a cocaine user to Maine CDC at 1-800-821-5821.

**For More Information:** Disease reporting or consultation is available by calling 1-800-821-5821.